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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/434,404	11/05/1999	ATSUSHI MATSUMOTO	862.3194	3919

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EXAMINER

POKRZYWA, JOSEPH R

ART UNIT PAPER NUMBER

2622

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/434,404	Applicant(s) MATSUMOTO ET AL.	
	Examiner Joseph R. Pokrzywa	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,10-17 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,10-17 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on 9/9/05, and has been entered and made of record. Currently, **claims 1-7, 10-17, and 26** are pending.

Response to Arguments

2. Applicant's arguments, see pages 8-11, filed 9/9/05, with respect to the rejection(s) of currently amended **claim(s) 1, 11, 12, 17, and 26**, which were previously cited under 35 U.S.C. 102(e) as being anticipated by Yhann (U.S. Patent Number 6,639,593), have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Matsukubo *et al.* (U.S. Patent Number 6,504,949).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1-7, 10-17, and 26** are rejected under 35 U.S.C. 102(e) as being anticipated by Matsukubo *et al.* (U.S. Patent Number 6,504,949).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Regarding *claim 1*, Matsukubo discloses an image processing apparatus (see Fig. 27, raster image processor 1313 and printer 1318, column 19, lines 5-30), comprising generation means (rasterizer 1314) for generating a bitmap image on the basis of inputted object data (column 2, lines 5-35, and column 13, line 60-column 14, line 10), hold means (attribute map memory 1316) for holding attribute information representing attributes of the inputted object data in units of pixels of a bitmap image generated by the generation means (column 13, line 56-column 14, line 28, and column 15, lines 3-17), the attribute information being formed by allocating plural bits of each pixel of the bitmap image and each of the plural bits indicating a different type of attribute respectively (column 13, line 56-column 14, line 28, and column 15, lines 3-17), conversion means (image processor 1317) for converting the bitmap image generated by the generation means into data capable of being processed by an image output unit (column 15, lines 7-column 16, line 26), and switch means (image processor 1317) for switching the contents of processing for each pixel of the bitmap image in the conversion means on the basis of a combination of the plural bits of attribute information held by the hold means corresponding to that pixel (column 15, lines 7-column 16, line 26).

Regarding **claim 2**, Matsukubo discloses the apparatus discussed above in claim 1, and further teaches that the holding means holds an attribute map in which the attribute information is arranged for each pixel corresponding to a two-dimensional coordinate position of the bitmap image (column 14, line 20-column 15, line 17).

Regarding **claim 3**, Matsukubo discloses the apparatus discussed above in claim 1, and further teaches that the holding means embeds the attribute information into bits of a part of each pixel data of the bitmap image (column 14, line 20-column 15, line 17).

Regarding **claim 4**, Matsukubo discloses the apparatus discussed above in claim 1, and further teaches that the attribute information includes information representing whether object data corresponding thereto has the form of bitmap data or the form of vector data (column 14, line 20-column 15, line 17).

Regarding **claim 5**, Matsukubo discloses the apparatus discussed above in claim 1, and further teaches that the conversion means includes processing for converting a bitmap image generated by the generation means into binary data using a dither matrix, and the switch means changes the dither matrix used in the conversion means on the basis of the attribute information (column 14, line 20-column 16, line 26).

Regarding **claim 6**, Matsukubo discloses the apparatus discussed above in claim 1, and further teaches that the generation means generates a bitmap image based on RGB color space, the conversion means includes color conversion processing for converting each pixel data of the bitmap image into pixel data represented by YMCK color space, and the switch means changes an algorithm of the color conversion processing on the basis of the attribute information held by the hold means (column 14, line 20-column 16, line 26).

Regarding *claim 7*, Matsukubo discloses the apparatus discussed above in claim 1, and further teaches that the attribute information is configured by a plurality of bits (column 14, line 20-column 15, line 17), and the switch means switches the contents of processing of the conversion means in accordance with a combination of ON/OFF states of each bit (column 14, line 20-column 15, line 17, whereby the on/off states correspond to the flags set at a “1” or a “0”).

Regarding *claim 10*, Matsukubo discloses the apparatus discussed above in claim 1, and further teaches that the object data is represented by page description language (column 1, line 62-column 2, line 35, column 13, line 53-column 14, line 10, and column 15, lines 29-67).

Regarding *claim 11*, Matsukubo discloses a storage medium storing a control program for image processing (see Fig. 27, raster image processor 1313 and printer 1318, column 19, lines 5-53), the control program comprising codes for a generation process (via rasterizer 1314) for generating a bitmap image on the basis of inputted object data (column 2, lines 5-35, and column 13, line 60-column 14, line 10), codes of a holding process (attribute map memory 1316) for holding attribute information representing attributes of the object data in units of pixels of a bitmap image generated in the generation process for holding in a memory (column 13, line 56-column 14, line 28, and column 15, lines 3-17), the attribute information being formed by allocating plural bits to each pixel of the bitmap image and each of the plural bits indicating a different type of attribute respectively (column 13, line 56-column 14, line 28, and column 15, lines 3-17), codes of a conversion process (via image processor 1317) for converting the bitmap image generated in the generation process into data capable of being processed by an image output unit (column 15, lines 7-column 16, line 26), and codes of a switching process (via image

processor 1317) for switching the contents of processing for each pixel of the bitmap image in the conversion process on the basis of a combination of the plural bits of attribute information corresponding to that pixel (column 15, lines 7-column 16, line 26).

Regarding *claim 12*, Matsukubo discloses an image processing system having a host device and an image output unit (see Fig. 27, host computer 1310, raster image processor 1313, and printer 1318, column 19, lines 5-30), comprising generation means (rasterizer 1314) for generating a bitmap image on the basis of inputted object data (column 2, lines 5-35, and column 13, line 60-column 14, line 10), hold means (attribute map memory 1316) for holding attribute information representing attributes of the inputted object data in units of pixels of a bitmap image generated by the generation means (column 13, line 56-column 14, line 28, and column 15, lines 3-17), the attribute information being formed by allocating plural bits of each pixel of the bitmap image and each of the plural bits indicating a different type of attribute respectively (column 13, line 56-column 14, line 28, and column 15, lines 3-17), conversion means (image processor 1317) for converting the bitmap image generated by the generation means into data capable of being processed by the image output unit (column 15, lines 7-column 16, line 26), and switch means (image processor 1317) for switching the contents of processing for each pixel of the bitmap image in the conversion means on the basis of a combination of the plural bits of attribute information held by the hold means corresponding to that pixel (column 15, lines 7-column 16, line 26).

Regarding *claim 13*, Matsukubo discloses the system discussed above in claim 12, and further teaches that the attribute information includes information organized hierarchically (column 14, line 20-column 16, line 26), and wherein there are one or more units of attribute

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information of low order concept which is subordinate to that of high order concept (column 14, line 20-column 16, line 26).

Regarding *claim 14*, Matsukubo discloses the system discussed above in claim 12, and further teaches that the attribute information contains information representing whether object data corresponding thereto represents a monochrome or a color object (column 14, line 20-column 16, line 26).

Regarding *claim 15*, Matsukubo discloses the system discussed above in claim 12, and further teaches that the attribute information contains information representing whether object data corresponding thereto represents a character or any kind of object other than characters (column 14, line 20-column 15, line 17).

Regarding *claim 16*, Matsukubo discloses the system discussed above in claim 12, and further teaches that the attribute information contains information representing whether it has a single bit or a plurality of bit strings (column 14, line 20-column 15, line 17) and whether or not it is a ground, and wherein the conversion means omits processing for a pixel which is a ground (column 14, line 20-column 16, line 26).

Regarding *claim 17*, Matsukubo discloses an image processing method (see Fig. 27, raster image processor 1313 and printer 1318, column 19, lines 5-30), comprising generating a bitmap image on the basis of object data inputted (via rasterizer 1314, column 2, lines 5-35, and column 13, line 60-column 14, line 10), holding in a memory attribute information representing attributes of the inputted object data in units of pixels of a bitmap image generated in the generating step (via attribute map memory 1316, column 13, line 56-column 14, line 28, and column 15, lines 3-17), the attribute information being formed by allocating plural bits of each

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pixel of the bitmap image and each of the plural bits indicating a different type of attribute respectively (column 13, line 56-column 14, line 28, and column 15, lines 3-17), converting the bitmap image generated in the generating step into data capable of being processed by an image output unit (column 15, lines 7-column 16, line 26), and switching the contents of processing for each pixel of the bitmap image in the conversing step on the basis of a combination of the plural bits of the attribute information held in the holding step corresponding to that pixel (column 15, lines 7-column 16, line 26).

Regarding *claim 26*, Matsukubo discloses an image processing apparatus (see Fig. 27, raster image processor 1313 and printer 1318, column 19, lines 5-30), comprising a bitmap generator (rasterizer 1314), arranged to receive inputted object data and to produce a corresponding bitmap image (column 2, lines 5-35, and column 13, line 60-column 14, line 10), a data holding unit (attribute map memory 1316), arranged to receive and to hold attribute information representing attributes of the inputted object data in units of pixels of the bitmap image generated by the bitmap image generator (column 13, line 56-column 14, line 28, and column 15, lines 3-17), the attribute information being formed by allocating plural bits of each pixel of the bitmap image and each of the plural bits indicating a different type of attribute respectively (column 13, line 56-column 14, line 28, and column 15, lines 3-17), a converter (image processor 1317) adapted to convert the bitmap image generated by the bitmap image generator into data capable of being processed by an image output unit (column 15, lines 7-column 16, line 26), and a switch unit (image processor 1317), adapted and arranged to switch the contents of processing for each pixel of the bitmap image in the converter on the basis of a

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combination of the plural bits of the attribute information corresponding to that pixel (column 15, lines 7-column 16, line 26).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

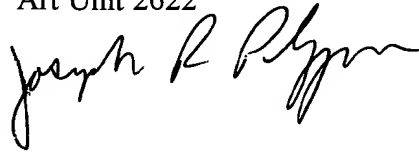
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joe Pokrzywa whose telephone number is (571) 272-7410. The examiner can normally be reached on Monday-Friday, 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph R. Pokrzywa
Primary Examiner
Art Unit 2622



jrp